Chapter 1
The Evolution of Public Pensions

From the Roman Empire to the modern nation state, rulers and parliaments have found it expedient to provide pensions for the workers who carried out their policies and, thus, helped perpetuate their regimes. The history of these public sector pension plans is both colorful and instructive. More than two thousand years ago, the fall of the Roman republic and the rise of the empire were inextricably linked to the payment, or rather the nonpayment, of military pensions. During the American Revolution army pensions became such a sensitive issue that only the personal intervention of George Washington prevented a mutiny of Continental troops over their promised pension payments. In the nineteenth century the U.S. navy pension fund went bankrupt on no fewer than three occasions, only to be bailed out by Congress each time. The management of the navy pension fund involved misfeasance, malfeasance, and nonfeasance of a strikingly bold nature. These and other episodes, which are detailed in this volume, provide the reader with a chronology of these historic events and a series of policy lessons pertaining to current employer-based pension plans.

In addition, the history of public sector pensions provides a laboratory of sorts for testing recent proposals for restructuring Social Security. The analysis also shows that many pension policies that are currently being proposed as new and innovative were part of military pensions at one time or another. This volume provides the first comprehensive record of the development of public pensions in the United States and explains those experiences in light of the continued evolution of employer pensions during the twentieth and twenty-first centuries.

It is typically thought that employer-provided pensions in the United States are a relatively recent form of compensation having been introduced by employers late in the nineteenth century or early in the twentieth. This perception is correct concerning private pensions and most public pensions for civilian employees; however, pensions for disabled and retired military personnel predate the signing of the U.S. Constitution. Military
Chapter 1

Pensions have a long history in Western civilization and have often been used as a key element to attract, retain, and motivate military personnel. This volume provides a detailed analysis of the establishment of pensions for American army and navy veterans from colonial times through the foundation of the modern military retirement system. The history of the management and funding of these pension systems contains many lessons for the contemporary debate concerning reform of the Social Security system, trends in employer pension plans, and the use of pension plans to achieve human resource objectives. The discussion documents that the development of pensions for other public sector employees at the state, local, and federal levels generally occurred in advance of the use of pension plans in the private sector.

This book has three primary objectives. First, we seek to provide a basic reference volume on the history of public sector pensions in the United States. No such comprehensive analysis of the development of these public pensions exists. Primary reference documents along with the rather sparse existing literature are the principal sources used to explain the emergence of pensions in the public sector. The focus is primarily on pensions in the United States, but we also describe the early development of pensions in Europe. Second, we explore the history of public pensions to identify policy lessons for modern day pension analysts. Examining the history of military and other public pensions offers numerous insights that are useful to today’s debate on restructuring Social Security and the expansion of defined contribution employer-provided pension plans. Finally, there is no easy way to disentangle the history of public sector pensions from that of the financial management of the monies in the pension funds and indeed, the evolution of finance itself. Thus, our final objective is to provide a chronology of the theory and practice of pension fund management. This history shows that advances in actuarial calculation and financial accounting generally contributed to the sound management of pension funds, but the actual assets held by the early public pension funds were not always those that were most consistent with the long-run interests of the funds’ annuitants. This finding also provides a valuable lesson for current debates concerning the restructuring of Social Security.

**Army and Navy Pension Plans**

From their earliest days, the American colonies provided pensions to disabled men who were injured defending the colonists and their property from native uprisings. During the Revolutionary War the colonies extended this coverage to the members of their militias. Several colonies maintained navies and offered pensions to their naval personnel. Independent of the actions of the colonial legislatures, the Continental Congress established pensions for its army and navy forces. Military pensions were continuously
provided, in one form or another, throughout the nineteenth century. The history of U.S. military pensions shows how Congress used pensions to provide replacement income for soldiers injured in battle, to offer performance incentives, to arrange for orderly retirements, and to respond to political pressures. These objectives were not always mutually consistent, and policy choices had to be made then just as they must be made today.

While the history of the army pension plan provides a valuable lesson in the principles of both economics and U.S. history, the navy pension plan in the nineteenth century offers a more interesting story because of its unique system of funding and managing the pension funds. Essentially, from its inception during the Revolution, the pension plan for officers and seamen was financed with monies from the sale of captured prizes. Revenues were very erratic over time, fluctuating with the fortunes of war and peace. To manage these monies, Congress established the navy pension fund and allowed the trustees of this fund to invest the monies in a wide range of assets, including private equities. The history of the management of this pension fund illustrates many of the problems that can arise when public pension monies are used to purchase private assets. The analysis of the management of the navy pension is particularly timely and important as Congress debates whether to allow monies in the Social Security trust fund to be invested in private equities. How these pension monies were managed in a developing financial market and how policy decisions and national economic conditions affected the solvency of the pension plan provide relevant lessons for the twenty-first century.

The history of the navy pension fund in the nineteenth century is filled with economic and political events that merit review and evaluation as retirement policy is reconsidered in the twenty-first century. Key events affecting the nineteenth-century naval pension system include the loss of a substantial proportion of its assets on bad investments in private equities and Congress’s bailout of the fund for these losses. In addition, some investment decisions seem to have been influenced by political pressures. The politically driven investments of the fund along with the bankruptcy of the fund after Congress greatly expanded benefits provide important lessons for the management of public pension plans. The eventual seizure of surplus funds by Congress, the subsequent transfer of these assets to the treasury’s general fund, and the replacement of tradable government debt with special issue, nontradable government bonds are also interesting developments in the history of these pension plans.

In contrast, the history of the army pension plan is much smoother, as this pension system was always financed on a pay-as-you-go basis from general revenues. However, both plans illustrate how nineteenth-century policy-makers used pension plans to achieve their human resource management objectives. These early pension plans provided performance incentives, helped attract new recruits, provided retirement and disability
income to loyal workers, and were often linked with mandatory retirement to achieve desired patterns of retirement. In addition, we show how these plans reflected the economics of management differences between the two services.

Each of these events can be directly related to the current debate concerning proposed changes in the U.S. Social Security system. Privatization, investment of trust funds in “pet” firms, and the moral hazards faced by government agents were all confronted by early public sector plans, and questions about their reemergence, should Social Security be “privatized,” remain. More generally, the debate over national and employer retirement plans is an issue facing countries around the world. The history described in this volume provides useful insights for countries at various stages of economic development, population aging, and financial market structure.

Public Pensions for Civilian Employees

Following the rise of military pensions, retirement plans were extended to state and local employees much later in the nineteenth century, and many public workers were not offered pensions until after World War I. After 1850, several large cities began providing disability and retirement benefits to employees in their police and fire departments. In addition, some cities also provided benefits to teachers and other employees. Many if not most of these early public plans either were disability plans or, if they were retirement plans, were largely funded with contributions made by the workers themselves. We have found no references to the use of pensions in small towns or rural county governments at that time. It was well into the twentieth century before pensions were generally provided to these public employees.

Eventually, some states also began to establish pension plans for state employees; however, these plans were primarily limited to teachers. Massachusetts established the first retirement pension plan for general state employees in 1911. The Massachusetts plan initially was something of a model for subsequent public sector pensions, but it was ultimately replaced by the standard defined benefit plan in which the pension annuity was based on years of service and end-of-career earnings. Curiously, the Massachusetts plan resembled, in some respects, what have been referred to more recently as cash balance plans. The plan required workers to pay up to 5 percent of their salaries to a trust fund. Benefits were payable upon retirement. Workers were eligible to retire at age 60, and retirement was mandatory at age 70. At the time of retirement, the state purchased an annuity equal to twice the accumulated value (with interest) of the employee’s contribution. The calculation of the appropriate interest rate was, in many cases, not straightforward. Sometimes market rates or yields from a portfolio of assets were employed; sometimes a rate was simply established.
by legislation (see Chapter 10). In general, the states were quite slow to adopt pension plans. As late as 1929, only six states had anything like a civil service pension plan for their employees (Millis and Montgomery 1938). The record shows that pensions for state and local civil servants are for the most part twentieth-century developments.

Nonmilitary federal workers were not systematically provided with retirement benefits until the establishment of the federal civil service pension in the early twentieth century. Before the passage of the Federal Employees Retirement Act in 1920, Congress granted pensions to federal employees on a case-by-case basis. The 1920 plan created a comprehensive pension system for U.S. civil service workers. Under this plan, a federal worker qualified for a pension after 15 years of service and upon reaching age 62, 65, or 70, depending on the worker’s civil service job. Retirement was mandatory at age 70, though extensions could be obtained in some cases. Workers contributed 2.5 percent of their salaries toward their pensions, and workers could earn a maximum pension of 60 percent and a minimum of 30 percent of their average salary in their last ten years of service.

After 1920, pension coverage in the public sector was relatively widespread, with all federal workers being covered by a pension and an increasing share of state and local employees included in pension plans. In contrast, pension coverage in the private sector during the first three decades of the twentieth century remained very low. Even today, pension coverage is much higher in the public sector than it is in the private sector. Over 90 percent of public sector workers are covered by an employer-provided pension plan, whereas only about half of the private sector workforce is covered (Employee Benefit Research Institute 1997).

**Pension Coverage in the Private Sector**

The use of retirement plans as a form of labor compensation for private sector employees began in the last quarter of the nineteenth century, nearly 100 years after the adoption of the first U.S. military pensions. Before focusing the analysis on the evolution of public pensions, a brief review of the formation of pensions in the private sector is useful as a point of reference.

America’s first formal, nonmilitary, employer-provided pension plan was created by the American Express Corporation in 1875 (Latimer 1932). By the turn of the century, only a handful of private companies had adopted retirement pension plans—primarily railroads, public utilities, and financial institutions. There were only 12 private pension plans in 1900 (Costa 1998). These plans were generally noncontributory, paid relatively small retirement benefits, and could be terminated at the discretion of the employer. By 1916, there were 117 private pension plans in existence, and the number was roughly 200 ten years later (Conyngton 1926).
Although pathbreaking in a way, these plans were not very generous in comparison to today’s private pension benefits. The plan offered by the General Electric Company was typical. After twenty years workers in the GE plan earned 1.5 percent of their average pay over the last ten years of service. Thus, even if wages and salaries increased with tenure, the plan would yield an annual pension of less than 30 percent of the worker’s pay during the final year on the job. The American Express plan was even less generous, paying a benefit of 1.5 percent for the first $1,200 of average pay over the last ten years of service and 1.0 percent of everything over that amount; the plan did provide a minimum benefit of $30 a month. Subsequent private pension plans typically paid out or “replaced” a considerably larger percentage of a worker’s income than these early plans did. Furthermore, as data in subsequent chapters of this volume illustrate, the early public plans were typically more generous than these early private pension plans.

Today, the term pension typically is used to refer to a retirement plan. In the past, pensions were more likely to be associated with disability and the inability to work due to physical injuries. The contrast between military pensions, other public sector pension plans, and plans in the private sector is even greater when considering disability pensions. While seamen and soldiers had such coverage supplied by the Continental Congress from the earliest days of the Revolution, in the private sector, well into the twentieth century, disability pensions or other payments for injuries incurred on the job were primarily covered by the good will of employers, and when that proved inadequate workers had to turn to the common law associated with negligence liability. To collect a disability payment from an employer from a job-induced injury, a worker had to demonstrate to the satisfaction of a judge or jury that the employer had not exercised “due care” in the workplace and that as a result of that negligence the worker was injured. The value of the protection offered to workers and their dependents from the common law was paltry by any standard.

Prior to passage of workers’ compensation legislation beginning in the 1910s, the average expected payment to a widow of a worker who died as a result of injuries incurred on the job would have been roughly half a year’s earnings. This was a one-time, lump-sum payment, not an annuity (Fishback and Kantor 1998). Some of the companies that offered retirement pensions also had formal disability plans. The amount of the disability payment was typically the same as that of the pension plan. The disability pension was usually only granted at the discretion of senior management, the board of directors, one of the board’s committees, or in some cases special “pension boards” (Conyngton 1926).

The relatively slow expansion of pension coverage among private sector employees continued throughout the first half of the twentieth century. Only about 15 percent of the private labor force was covered by a pension in 1940. Thereafter, pension coverage began to expand rapidly in response
to higher individual tax rates, changes in collective bargaining regulations concerning pensions, and national economic policies including wage and price controls that excluded pension payments (see Clark and McDermed 1990). Thus, among the most striking characteristics of public sector pension plans when compared to private sector plans are their longer history and the greater value of the public plans.

Implications for Contemporary Policy Analysis

The analysis in this volume presents a comprehensive history of the development of public pensions in the United States from colonial times through the 1920s. The discussion illustrates that pensions were introduced in the public sector to help public administrators attract and retain quality workers, to provide them with performance incentives, and to retire them in an orderly fashion. This history of pension plans shows that understanding pension economics is not just a modern phenomenon. Government leaders from the Caesars to early modern kings to modern parliaments have developed pension systems to provide appropriate incentives to their soldiers. In addition, the history of military pensions in America provides many lessons to those attempting to resolve problems associated with funding and managing retirement plans in the twenty-first century. Examples of these lessons are briefly reviewed below but are examined in more detail in the ensuing chapters.

An early study of U.S. military pensions summarized the history of military pensions in the United States by concluding:

The story is both heartening and depressing. The reader who is also an American citizen will take a pardonable pride in the fact that, as the story shows, the American people have been moved by generous impulses in their provision for those who at one time or another risked their lives in the military and naval service of their country. But he will be depressed by the account of moral degeneration and political corruption that gradually crept into the administration and operation of our old pension system as in the lapse of time the sterner motives and higher ideals which lead to its adoption faded into the dim background of the memories of the war. (David Kinley, quoted in Glasson 1918, viii)

From the earliest days of colonial America through the first century of the United States, pensions were introduced, coverage expanded, and benefits formulas changed in response to changing economic conditions and the need to influence the actions of military personnel. Improvements in plans were made to attract recruits during boom times, pensions were altered and coupled with mandatory retirement in an effort to increase retirements, and retirement benefits were used as deferred compensation in an effort to provide performance incentives. Knowledge of pension incentives improved throughout the nineteenth and twentieth centuries. For example,
the federal civil service pension that covered all federal employees until 1983 provided significant incentives for a worker to remain with the government until the employee was eligible for early retirement benefits and then provided significant retirement incentives (Ippolito 1987).

The history of public pensions clearly shows that there is a political, and economic, risk associated with ongoing retirement plans. The government can and does change the rules. The eighteenth and nineteenth centuries provide numerous examples of such changes, as does the twentieth century. In the 1800s, Congress expanded veterans’ benefits to include payments to widows and orphans and then terminated the benefit. Between its establishment of the Social Security system in 1935 and 1975, Congress regularly increased Social Security benefits; then legislation in 1977 and 1983 reduced expected benefits. The history of public sector pensions shows that the risk of government policy changes should be included in any assessment of the future structure of Social Security.

The history of the operations of the navy pension funds provides additional lessons for the current debate. The navy pension plan represents one of the earliest uses of a fund to finance the operations of the pension system. The record indicates that political pressures played a role in the type of assets purchased for the fund. Presidential opposition (most notably, that of Thomas Jefferson and Andrew Jackson) probably was responsible for the trustees not purchasing shares in blue chip investments like the First, or Second, Bank of the United States. Jackson told one colleague, future president James K. Polk: “Every one that knows me does know that I have always been opposed to the U[nited] States Bank,” and he told another, Martin Van Buren, “I will kill it” (Schlesinger 1945, 76, 89). On the other side of the ledger, pressure from prominent leaders may well have led the trustees to buy shares in local banks that were very risky. Have times changed? If monies from the Social Security trust fund are used to buy private equities, will they be required to be allocated to politically acceptable investments? This could include mandatory purchase of companies in inner cities or being precluded from investing in companies or industries that are currently out of political favor.

Another historical precedent associated with the navy pension fund occurred in the 1860s. Prizes had been plentiful for the Union navy during the Civil War; consequently the navy pension fund became quite large. In the aftermath of the war the fund had sufficient assets to pay all of its liabilities for the foreseeable future. However, at that point, Congress chose to expropriate the assets of the fund in order to help pay down the national debt. The fund’s securities were replaced with special issue bonds that were not tradable and that yielded smaller interest payments. Since the surplus monies in the fund could have gone toward benefits to navy veterans and their dependents, this action represented a confiscation of wealth on the part of Congress. This action was clearly based on political influences and not due to an actuarial assessment of the status of the pension fund relative
to current and future liabilities. These special issue government bonds were a precursor of the modern day bonds held in the Social Security trust fund. In a sense, Congress funded the normal operations of the government in the 1990s through a surplus from the Social Security trust fund on the promise that in the future sufficient funds would be appropriated by Congress to pay accrued Social Security benefits. Congress had done essentially the same thing with the navy pension fund more than 130 years before.

Beginning in 1800, the navy pension fund was allowed to invest in private equities. The fund’s experience with these investments proved to be disastrous, as all the private firms in which it bought shares went bankrupt, and the fund lost its entire investment. This experience certainly highlights the risk of private investment with public monies. As noted above, these investment choices were likely influenced by political pressure. The loss of capital was not the end of the story. The trustees petitioned Congress for funds to make up for these losses, and Congress appropriated money to cover both the losses of capital and foregone interest. Once again this illustrates a point that is often overlooked in the debate concerning different structures for reforming Social Security. If individuals or groups of individuals are allowed to invest in private equities, they run a risk of having bad luck or making poor choices and suffering a capital loss. Would a future Congress stand by and let a generation of older Americans have lower retirement benefits because of a sharp decline in the stock market? Or would Congress come to the rescue of these retirees and supplement their pension benefits?

A final parallel with the current debate on Social Security reform is the administrative costs of private investments. The navy pension fund used government agents to buy the shares in the local banks. These agents charged commissions that reduced the gross return on these investments. In contrast, some of the fund’s purchases of government securities or shares in the Second Bank of the United States were made directly from the treasury, thus limiting the cost of acquisition. In addition, the use of agents provided opportunities for malfeasance. The agents often retained dividends and other funds for prolonged periods. Such actions deprived the fund of the opportunity to reinvest these monies. The agents traded from their own accounts and purchased assets for the fund from those accounts. One argument against private accounts or investing the Social Security trust fund in private equities is that this policy will substantially increase the administrative cost of operating the program (Mitchell 1998). This was certainly true in the nineteenth century.

Our review of the history of public sector pensions contains an overview of how pension plans can be used by employers to attract, retain, motivate, and retire workers. While the formal application of these economic models has been developed in the past three decades, the history of pensions in the United States clearly indicates that policymakers in the eighteenth and
nineteenth centuries understood many of the basic incentives associated with these plans.

Because public sector pensions date back more than 2000 years in Western civilization, we must also review some of the key features of the history of pensions before they became part of U.S. public policy.

As our introduction above suggests, the history of the navy pension plan during the nineteenth century offers simultaneously a unique history and some valuable lessons for Social Security reform. Our review covers the creation of the U.S. navy pension plan during the American Revolution, its subsequent failure, and its revival in the first half of the nineteenth century. Both plans were funded with prizes captured by the navy. We also analyze the financial operations of the navy pension fund during the nineteenth century and its subsequent failure. We then turn to the reestablishment of the navy pension fund during the Civil War and the road to its ultimate demise after Congress expropriated the fund’s assets.

Army pensions date from the Revolution as well. We compare the army and navy pension schemes since the Revolution. This discussion examines why the two plans were funded using such different methods and reports the details of how the two plans were finally merged into a single military pension system.

We emphasize military pensions because they have such a long and colorful history; however we also review the history of pensions for other public sector workers as well. This review includes the establishment of the federal civil service pension plan in the early twentieth century. It also includes a review of the adoption and management of pensions by state and local governments. Throughout the analysis, we provide considerable detail on the size and operation of these early pension plans along with how the plans were affected by political, economic, and social events.

Overall, the analysis presented in this volume makes three principal contributions to the study of pensions. First, the historical development of public pension plans in the United States is comprehensively described. Important data concerning coverage, fund management, and benefits paid have been gleaned from various primary and secondary sources and are reported throughout the volume. Readers interested in how and why pensions emerged will find this discussion very useful. Second, the experiences of public pensions in the nineteenth and early twentieth centuries provide numerous lessons for policy analysts concerned with reforming Social Security and employer pensions in the twenty-first century. Many of the reforms currently being discussed were actually implemented and in some cases discarded in early days. Finally, the volume provides a detailed history of American financial markets and how they influenced the development of employer pensions. Financial historians will find substantial new information to consider concerning rates of return, assets available for purchase, and the maturing of the bond and equity markets.